Terror management in Japan

Steven J. Heine
*University of British Columbia, Vancouver,
British Columbia, Canada*

Motoko Harihara
University of Tokyo, Tokyo, Japan

Yu Niiya
University of Michigan, Michigan, USA

Do terror management effects generalize to non-Western cultures? This question is significant because terror management theory offers an explanation of the origin of self-esteem, whereas other research finds divergent self-esteem motivations across cultures. The effects of mortality salience (MS) on the dual-component anxiety buffer were investigated in Japan. A control group and a MS group were given an opportunity: (i) to defend their cultural worldview by derogating an anti-Japan essay writer; and (ii) to boost their value within their cultures by indicating a greater desire for high-status over low-status products. Replicating past research with Western samples, Japanese in a MS condition were more critical of the anti-Japan essay writer and they indicated a marginal tendency to prefer high- over low-status products, compared with a control group. The theoretical implications are discussed.

Key words: culture, Japanese, self, terror management.

Terror management in Japan

One of the boldest and most far-reaching theories regarding the self-concept is terror management theory (TMT). Borrowing from a number of existential theorists including Becker (1973), Freud (1929), Lifton (1976) and Rank (1941), TMT concerns itself with the existential anxiety associated with people's thoughts about their inevitable demise. A primary goal for all species is self-preservation and humans, having the cognitive capabilities to comprehend that their death is imminent, are inescapably aware that they will fail at this central goal. A consideration of the ultimate futility of one's efforts to preserve his or her existence must, indeed, be distressing and overwhelming. Avoiding such distressing thoughts

is an important concern and TMT explores the diverse array of ways that people go about keeping their existential fears at bay (Pyszczynski *et al.*, 1997). For example, avoiding thoughts of one's death has been linked with prejudice (e.g. Greenberg *et al.*, 1990; McGregor *et al.*, 2001), maintenance of cultural norms (Rosenblatt *et al.*, 1989), self-esteem maintenance (Greenberg *et al.*, 1992b; Harmon-Jones *et al.*, 1997), protection of cultural icons (Greenberg *et al.*, 1995), optimal distinctiveness theory (Simon *et al.*, 1997), reckless driving (Taubman *et al.*, 1999), nationalism (Greenberg *et al.*, 1994; Nelson *et al.*, 1997), objective self-awareness (Arndt *et al.,* 1998), the false-consensus effect (Pyszczynski *et al.*, 1996), a desire for high-status products (Mandel & Heine, 1999), sexual neuroses (Goldenberg *et al.*, 1999) and aggression (McGregor *et al.*, 1998), to name several. Considering the extraordinary range of phenomena that have been linked to TMT, it would not be an exaggeration to argue that TMT could be viewed as the unified theory of self-psychology; a claim that the theory's founders do make (Pyszczynski *et al.*, 1997). Indeed, it is challenging to come up with domains of social psychology that have not yet been explored in the framework of TMT.

Dual-component cultural anxiety buffer

Terror management theory argues that people have constructed a dual buffer to protect themselves from the existential anxiety that arises from the awareness of their ultimate mortality. This dual buffer consists of a structure (i.e. the individual's cultural worldview) and the individual's place within that structure (i.e. his or her ability to live up to the standards determined by his or her cultural worldview, Pyszczynski *et al.*, 1999). The cultural worldview is a constructed conception of reality that provides the individual with a sense of order, stability and predictability. Within this worldview is a consensually shared set of standards that mandate what kinds of actions or thoughts are of value. By living up to the standards that are inherent in the cultural worldview, individuals are able to gain a sense of value from their cultures. TMT argues that this perception that one meets the cultural standards of value is self-esteem. As cultures, unlike individuals, do not inevitably die, viewing oneself as having a valued place within a meaningful cultural worldview will provide the individual with symbolic feelings of immortality (Pyszczynski *et al.*, 1997).

When confronted with thoughts of one's mortality, one can combat the anxiety by bolstering either of the dual components of the cultural anxiety buffer. One strategy is to reinforce the structure and increase faith in the validity of one's cultural worldview. For example, one can become critical towards people who act in ways that are inconsistent with the cultural worldview (e.g. Rosenblatt *et al.*, 1989). Another strategy is to reinforce one's place within the structure, by elaborating on one's sense of value. For example, one can desire possessions that convey that one has the trappings of success in their culture (e.g. Mandel & Heine, 1999).

Concerns with the representativeness of the sample

The logic of terror management theory is rather straightforward and compelling (but see Leary & Schreindorfer, 1997 for a contrary view). Moreover, the vast empiric literature, as reviewed above, is generally in support of the theory: reminders of one's mortality lead to a host of responses to secure symbolic immortality.

However, it is critical for a theory that aspires to explain human nature to be evaluated against a representative sample of humanity. The vast majority of published research on TMT

has been conducted in the USA and its international support has been found in Canada, Germany, Israel and the Netherlands (Greenberg *et al.*, 1997). All of these cultures are Western, characterized by an elaboration of the individualistic nature of the self (Triandis, 1989). Given this biased nature of the sample, one reasonable possibility is that TMT captures a motivational system of individualists. Arguments for the theory's universal nature would be supported if the findings could be replicated in a non-Western culture. This is not a trivial point; many of psychology's key theories have been found to generalize poorly to non-Western cultures (Heine, 2001; Markus & Kitayama, 1991; Nisbett *et al.*, 2001) thus offering a direct challenge to theories that make claims of psychic unity.

We sought to explore whether the kinds of terror management effects that have been found in the West could be observed in Japan as well. Japan represents an interesting test case for TMT. On the one hand, a fear of death would seem to be universal (i.e. Japanese too must ultimately fail at goals of self-preservation). This reasoning would suggest that TMT should apply in Japan too. However, TMT maintains that the need for self-esteem stems from our underlying fears of death (e.g. Pyszczynski *et al.*, 1997). Because other research has noted that a need for self-esteem, as it is conceptualized and operationalized in mainstream psychology, is weaker in Japan relative to North America (e.g. Heine *et al.*, 2001; Heine, in press; Heine *et al.*, 1999), this raises the possibility that fears of death might be somehow muted in Japan. To the extent that this latter hypothesis is correct, we should expect that TMT effects would be weaker in Japan.

We wished to see whether Japanese would also bolster their dual-component cultural anxiety buffer when they were confronted with reminders of their own mortality. We explored reactions to both components of the buffer. First, we considered whether Japanese would reinforce their cultural worldview. One way to investigate this is to see how participants evaluate a person who ostensibly wrote an essay criticizing their country. A critical view of one's country is not consistent with one's culture being good, stable and true and, thus, individuals are expected to react more negatively to these criticisms when reminded of their mortality. This has been found in a number of past studies (Greenberg *et al.*, 1994; McGregor *et al.*, 1998). Second, we considered whether Japanese would reinforce their perceptions of value within the cultural system. One way that individuals can gain value vis a vis consensually shared standards is by owning products that confer status. High-status products convey the message that one is meeting some implicit standards associated with success in their society. Past research has found that people prefer high-status products over low-status products more if they have been reminded of their mortality (Mandel & Heine, 1999). In the present study, we had Japanese participants evaluate a person who wrote a highly critical essay about Japan and evaluate a series of high- and low-status products.

Methods

Participants

Participants were students at University of Tokyo who had responded to advertisements inviting participation in a questionnaire study. Participants were paid 1000 yen ($\approx$ 8 USD) each for their participation. A total of 60 people (41 males and 19 females) agreed to participate. Sex was explored in all analyses; however, there were no significant main effects for sex, nor sex by condition interactions.

Materials

Participants completed a questionnaire packet that included the following measures:

1 The manipulation. Half of the participants were randomly assigned to the mortality salience (MS) condition and received a manipulation designed to increase thoughts of their own feelings of mortality. Participants were asked to complete two open-ended questions: 'Please briefly describe the emotions that the thought of your own death arouses in you', and 'Jot down as specifically as you can, what you think will happen to you as you physically die, and once you are physically dead'. These two questions have been found to be successful in eliciting mortality salience in a number of past studies (Greenberg *et al.*, 1990; Harmon-Jones *et al.*, 1997). The remaining half of the participants were randomly assigned to a control condition. Following some past research on terror management (McGregor *et al.*, 1998), they were asked to complete two open-ended questions about their thoughts towards an important examination.

2 Positive and Negative Affect Scale (PANAS; Watson *et al.*, 1988). This scale was included to assess whether the MS manipulation had any impact on participants' moods as well as to provide a distraction to allow MS thoughts to fall outside of focal attention (Greenberg *et al.*, 1994). Past research has also used this scale for these purposes (e.g. Greenberg *et al.*, 1992b).

3 Evaluation of two essay writers. Participants read two essays and were then asked to evaluate each of the writers. The first essay served as a control and contained neutral content. It described how the author liked to play sports in his spare time. The second essay served to threaten participants' cultural worldviews. It was an ad hominem attack on Japan, allegedly written by a foreign student. It read as follows:

> I have been in Japan for 6 years, but I really think Japan is a wretched country. It always imitates other countries, and it has no originality at all. Cars and computers made in Japan are often said to be of good quality, but it is nothing but a copy of what other countries have made, and I think it doesn't have enough imagination to create anything new. It's obvious when you look at the arts. There are no big names like Michelangelo and Beethoven who are famous around the world. Some people are happy doing the tea ceremony or calligraphy, but I don't think these are real arts. They aren't known in other countries. Japanese people lack individuality to begin with. If someone says 'go right', then everybody says 'go right.' They do it just because everybody else is doing it, and they don't even think. Recently, some people have started talking about 'originality' and 'self-ness', but I don't think it is worth talking about. Japanese just like being similar to each other, and they follow the group like dumb sheep. They are always afraid of being criticized by others around them. It is not worth telling them to change because they never could.

Following each essay participants were asked to evaluate the essay writer. Specifically, they were asked 'How much do you like this person?', 'How intelligent do you think this person is?', 'How knowledgeable do you think this person is?' and 'How much do you agree with this person's opinion?' on a 9-point scale ranging from 1 (not at all) to 9 (extremely). Then, participants were asked to indicate on a 9-point scale ranging from 1 (not at all applicable) to 9 (extremely applicable) how well a number of positive (flexible, rational, patient, warm and practical) and negative traits (rigid, arrogant, insensitive, obnoxious and self-centered) applied to the essay writer. These traits were adapted from the Interpersonal Judgment Scale (Byrne, 1971). All of these items have been used in past TMT research (Greenberg *et al.*, 1992a; Harmon-Jones *et al.*, 1997).

4 Evaluation of high- and low-status products. Participants were presented with two advertisements for high-status products (one for a Jaguar automobile and one for *youkan*, a

Japanese sweet, made by Toraya, which is a famous and costly brand name) and two for low-status products (one for a 'Duet', a small, budget-friendly automobile made by Toyota and another for Pringles potato chips). Participants were asked 'If you were thinking about buying a car (some snacks), how likely would you be to purchase a Jaguar (other product names)?' on a 7-point scale ranging from 1 (very unlikely) to 7 (very likely). This measure has been successfully used in past TMT studies (Mandel & Heine, 1999).

5 Status manipulation check. Participants were asked to indicate how much status they thought each of the products was associated with by rating it on a scale that ranged from 1 (low status) to 7 (high status).

6 Demographic Information. This included participant's age, sex and country of birth.

The entire study was conducted in Japanese with Japanese materials. The manipulation, the PANAS and the evaluation questions were translated into Japanese from English (and were checked by a few translators using a procedure by Heine *et al.*, 2001, whereas the remaining materials were created in Japanese.

Results

Evaluations of essay writers

We created a composite variable indexing the positivity of participants' attitudes towards the essay writers by averaging their responses to the trait and evaluation items (after first reverse-scoring the negatively worded items). Cronbach alphas for the composite were 0.78 for the sports essay and 0.81 for the anti-Japan essay. We first examined the evaluations of the sports essay. There was no difference between the control and the MS conditions, $F < 1$ (Table 1). Being reminded of one's mortality did not affect how people evaluated a target discussing innocuous opinions regarding sports. An examination of the anti-Japan essay, in contrast, revealed that people in the MS condition viewed the essay writer significantly more negatively than did those in the control condition, $F_{1,58} = 4.86$, $p < 0.04$. This reaction was slightly more pronounced for the positive traits, $F_{1,58} = 4.75$, $p < 0.04$, than it was for the negative traits, $F_{1,58} = 2.07$, *ns*. Being reminded of one's mortality was specifically associated with less positive views towards a foreigner who held negative views of one's country. This pattern of results replicates that found in other terror management research (McGregor *et al.*, 1998).

Evaluations of status products

First, we wished to determine whether participants viewed the status of the products in the way that we had intended. An analysis of the manipulation check revealed that both of the high-status products (Jaguar $M = 6.13$, *youkan* $M = 5.07$) were, indeed, viewed to have higher status than the low-status products (Duet $M = 3.43$ and Pringles $M = 2.77$), $F_{1,159} = 217.75$, $p < 0.001$. Next, we compared how positively participants evaluated the two high-status and two low-status products. An examination of the two high-status products revealed no effect for condition for either the Jaguar automobile or the *youkan* snack, both Fs < 1. The effect was also null when examining the two high-status products combined, $F < 1$. This null pattern represents a failure to replicate past research exploring mortality salience and high-status products (Mandel & Heine, 1999). An examination of the two low-status products revealed no effect for condition for the Duet automobile, $F < 1$; however, the Pringles were viewed significantly more negatively by those in the MS condition, $F_{1,58} = 4.86$, $p < 0.04$. An examination of the two low-status products together revealed that those in the MS condition

Table 1 Dependent variables

	Control condition	Mortality salience condition
Sports essay	4.54[a]	4.30[a]
	(1.05)	(1.09)
Anti-Japan essay	3.74[a]	3.20[b]
	(0.94)	(0.95)
Jaguar automobile	3.07[a]	3.20[a]
	(1.72)	(1.85)
Youkan snack	4.07[a]	4.43[a]
	(1.86)	(1.55)
Combined high status	3.57[a]	3.82[a]
	(1.19)	(1.02)
Duet automobile	4.00[a]	3.83[a]
	(1.31)	(1.46)
Pringles snack	4.23[a]	3.37[b]
	(1.43)	(1.61)
Combined low status	4.12[a+]	3.60[a+]
	(0.94)	(1.18)
Positive effect	30.7[a]	29.3[a]
	(5.01)	(7.67)
Negative effect	19.3[a]	18.7[a]
	(8.14)	(5.25)

Columns that do not share the same subscripts are different at $p < 0.05$; [+] columns are different at $p < 0.07$.
SD are reported in parentheses.

viewed the products in marginally less positive terms than those in the control group, $F_{1,58} = 3.49$, $p < 0.07$. The interaction between condition and status was marginally significant, $F_{1,58} = 3.28$, $p < 0.08$, replicating a pattern observed in past studies (Mandel & Heine, 1999). Overall, there was a marginal tendency for people to have a greater preference for high-status products over low- when reminded of their death.

One possibility for the weak effects in the product evaluations is that people who had engaged in worldview defense in their reactions to the anti-Japan essay had already successfully dispelled their existential anxieties and, as such, had less motivation to enhance their personal value through their evaluations of the products. Indeed, the vast majority of TMT studies only include one dependent measure to avoid such a situation. To investigate this possibility we examined the correlations between the dependent measures (anti-Japan essay, high- and low-status product evaluations). However, none of the correlations were significant (all ps > 0.25). This suggests that people's worldview defense with the anti-Japan essay was unrelated to their value-enhancing tendencies in the product evaluations.

Positive and negative affect

One alternative explanation for the results obtained here is that being reminded of one's imminent death put participants in a more negative mood, and this lowered mood affected participants' reactions to the anti-Japan essay writer and the evaluation of the products.

However, replicating much past research (Greenberg *et al.*, 1994; Harmon-Jones *et al.*, 1997; Mandel & Heine, 1999) a comparison of both positive and negative affect revealed no effect for condition, both Fs < 1. This alternative explanation is thus not supported. Mortality salience manipulations lead to specific effects that are distinct from variations in mood.

Discussion

The present paper reveals that terror management effects are not exclusive to Western cultures but are also evident in Japan. First, upon being confronted with thoughts of their deaths Japanese become especially critical towards an essay writer who criticized their country (but not towards someone who wrote an essay on an innocuous topic). This replicates research conducted with Westerners (McGregor *et al.*, 1998). This demonstrates that a tendency to bolster one's cultural worldview when considering one's own mortality is also observable outside of Western culture. Second, mortality salience led Japanese to have a marginally greater preference for high-status products compared with low-status products. Although the pattern was not significant and we should, hence, be cautious in accepting it, it is similar to what has been demonstrated before with Westerners (Mandel & Heine, 1999). This suggests that a tendency to bolster one's sense of value within a cultural worldview may also generalize outside of the West. The magnitude of these two effects appears relatively comparable in our Japanese sample to that observed in studies with Western samples (the effect sizes appear to be reasonably similar); however, a direct cross-cultural analysis is impossible as we cannot equate either the threat to an individual's worldviews that a critical essay conveys (the content of the essays are tailored for each culture), nor of the desirability of the status products within each culture. Nonetheless, the results reveal that terror management research generalizes to Japanese samples.

One cross-cultural divergence that was evident in our findings was that past studies found that mortality salience resulted in high-status products being preferred more, whereas preferences for low-status products were relatively unaffected (Mandel & Heine, 1999). In contrast, in our Japanese sample, preferences for high-status products remained relatively unaffected, whereas preferences for low-status products marginally decreased after mortality salience. Although the interaction between condition and status was roughly comparable in magnitude across cultures, the individual components of the interaction differed. It is possible that this cultural difference reflects a greater concern with the costs of low status in Japan compared with a greater concern for the benefits of high status in North America. However, one potential confound from the experimental design was that the status of the product and the country of origin were at odds for two of the four products (i.e. the low-status car and the high-status snack were from Japan, whereas the high- status car and the low-status snack were foreign). It is conceivable that the desirability of status is influenced by whether the product is domestic, particularly after mortality salience. Consistent with this alternative explanation, there was a marginally significant interaction between status and condition for the snack products (where high status was domestic and low status was foreign), $F_{1,58} = 3.80$, $p < 0.06$, but there was no interaction for the cars (where the high-status car was foreign and the low-status car was domestic), $F < 1$. Interestingly, this alternative explanation that Japanese value domestic over foreign products more after mortality salience is also consistent with TMT (Nelson *et al.*, 1997). Until future research can identify whether effects of status are still evident in Japan for products from Japan, we think it is best to view the status product findings as preliminary.

That TMT generalizes to Japan is theoretically interesting, as much other research has found that other motivations regarding self-esteem are much weaker in Japan than in North America (Heine *et al.*, 1999, 2001; Heine, in press). As TMT maintains that the purpose of the dual-component anxiety buffer is to allow people to maintain a sense of self-esteem in the face of their existential anxieties (Greenberg *et al.*, 1992b), the Japanese findings from these two research programs appear to be contradictory. If the anxiety buffer serves to build self-esteem and Japanese rely on the buffer to a comparable extent as North Americans, then it would seem reasonable to expect that Japanese would also possess comparable self-esteem motivations as North Americans. However, much research reveals that Japanese report lower self-esteem, larger actual-ideal discrepancies, weaker self-enhancing biases, fewer self-evaluation maintenance strategies and respond to failures in quite different ways, compared with North Americans (see Heine, in press; for a review). How can we integrate these two conflicting sources of evidence?

One possibility is that the motivation for self-esteem is a specific cultural manifestation of a more general, underlying motivation to maintain meaning. TMT maintains that a motivation to feel that one is a key player in a meaningful cultural drama is universal; however, this might only manifest in self-esteem motivations among people from individualistic cultures (at least for the kinds of motivations traditionally studied by psychologists). That is, the desire for a meaningful existence within individualistic cultures might hinge on viewing oneself as an object of value, as one's identity is primarily grounded in feelings that one is an autonomous individual (Cousins, 1989; Markus & Kitayama, 1991; Heine *et al.*, 1999). In contrast, in cultures where identity is importantly grounded in one's roles and memberships with significant ingroups, as is arguably the case in Japan (Cousins, 1989; Heine, 2001; Markus & Kitayama, 1991), a meaningful existence may be attained better through other means, for example, by maintaining 'face' (Heine *et al.*, 1999; Heine, in press); that is, by having one's existence confirmed as meaningful via social consensus.

This speculation is consistent with both cultural theories of self-esteem and TMT, as well as with the empiric evidence that has been marshaled thus far. However, empiric studies of face are largely lacking at this time, preventing us from exploring the relation between face-maintenance and meaning-maintenance among East Asians. Future research investigating the bases of meaning and the link between mortality salience and divergent self-esteem motivations across cultures would shed much light on this reasoning.

Acknowledgments

References

Arndt, J., Greenberg, J., Simon, L., Pyszczynski, T. & Solomon, S. (1998). Terror management and self-awareness: Evidence that mortality salience provokes avoidance of the self-focused state. *Personality and Social Psychology Bulletin, 24,* 1216–1227.

Becker, E. (1973). *The Denial of Death*. The Free Press, New York.

Byrne, D. (1971). *The Attraction Paradigm*. Academic Press, San Diego, CA.

Cousins, S. D. (1989). Culture and selfhood in Japan and the U.S. *Journal of Personality and Social Psychology, 56,* 124–131.

Freud, S. (1929/1984). *Civilization and its Discontents*. Norton, New York.

Goldenberg, J. L., Pyszczynski, T., McCoy, S. K. & Greenberg, J. (1999). Death, sex, love, and neuroticism: Why is sex such a problem? *Journal of Personality and Social Psychology, 77,* 1173–1187.

Greenberg, J., Porteus, J., Simon, L., Pyszczynski, T. & Solomon, S. (1995). Evidence of a terror management function of cultural icons: The effects of mortality salience on the inappropriate use of cherished cultural symbols. *Personality and Social Psychology Bulletin, 21,* 1221–1228.

Greenberg, J., Pyszczynski, T., Solomon, S., *et al.* (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology, 58,* 308–318.

Greenberg, J., Pyszczynski, T., Solomon, S., Simon, L. & Breus, M. (1994). Role of consciousness and accessibility of death-related thoughts in mortality salience effects. *Journal of Personality and Social Psychology, 67,* 627–637.

Greenberg, J., Simon, L., Pyszczynski, T., Solomon, S. & Chatel, D. (1992a). Terror management and tolerance: Does mortality salience always intensify negative reactions to others who threaten one's worldview. *Journal of Personality and Social Psychology, 63,* 212–220.

Greenberg, J., Solomon, S. & Pyszczynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. In: Zanna, M., ed. *Advances in Experimental Social Psychology*, vol. 29, pp. 61–139. Academic Press, San Diego, CA.

Greenberg, J., Solomon, S., Pyszczynski, T., *et al.* (1992b). Why do people need self-esteem? Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of Personality and Social Psychology, 63,* 913–922.

Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S. & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduces mortality salience effects. *Journal of Personality and Social Psychology, 72,* 24–36.

Heine, S. J. (2001). Self as a product of culture: An examination of East Asian and North American selves. *Journal of Personality, 69,* 881–906.

Heine, S. J. An exploration of cultural variation in self-enhancing and self-improving motivations. *Nebraska Symposium of Motivation* (in press).

Heine, S. J., Kitayama, S., Lehman, D. R., *et al.* (2001). Divergent motivational consequences of success and failure in North America and Japan: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81,* 599–615.

Heine, S. J., Lehman, D. R., Markus, H. R. & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review, 106,* 766–794.

Leary, M. R. & Schreindorfer, L. S. (1997). Unresolved issues with terror management theory. *Psychological Inquiry, 8,* 26–29.

Lifton, R. J. (1976). *The Life of the Self*. Basic Books, New York.

McGregor, H. A., Lieberman, J. D., Greenberg, J., *et al.* (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview-threatening others. *Journal of Personality and Social Psychology, 74,* 590–605.

McGregor, I., Zanna, M. P., Holmes, J. G. & Spencer, S. J. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology, 80,* 472–488.

Mandel, N. & Heine, S. J. (1999). Terror management and marketing: He who dies with the most toys wins. *Advances in Consumer Research, 26,* 527–532.

Markus, H. R. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98,* 224–253.

Nelson, L., Moore, D. L., Olivetti, J. & Scott, T. (1997). General and personal mortality salience and nationalistic bias. *Personality and Social Psychology Bulletin, 23,* 884–892.

Nisbett, R. E., Peng, K., Choi, I. & Norenzayan, A. (2001). Culture and systems of thought: Holistic vs. Analytic cognition. *Psychological Review, 108,* 291–310.

Pyszczynski, T., Greenberg, J. & Solomon, S. (1997). Why do we need what we need? A terror management perspective on the roots of human social motivation. *Psychological Inquiry, 80,* 1–20.

Pyszczynski, T., Greenberg, J. & Solomon, S. (1999). A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review, 106,* 835–845.

Pyszczynski, T., Wicklund, R. A., Floresku, S., *et al.* (1996). Whistling in the dark: Exaggerated consensus estimates in response to incidental reminders of mortality. *Psychological Science 7,* 332–336.

Rank, O. (1941). *Beyond Psychology*. Dover, New York.

Rosenblatt, A., Greenberg, J., Solomon, S., Pyszczynski, T. & Lyon, D. (1989). Evidence for terror management theory. I. The effects of mortality salience on reactions to those who violate or uphold cultural values. *Journal of Personality and Social Psychology, 57,* 681–690.

Simon, L., Greenberg, J., Arndt, J., Pyszczynski, T., Clement, R. & Solomon, S. (1997). Perceived consensus, uniqueness, and terror management: Compensatory responses to threats to inclusion and distinctiveness following mortality salience. *Personality and Social Psychology Bulletin, 23,* 1055–1065.

Taubman, O., Florian, V. & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: a test of terror management mechanisms. *Journal of Personality and Social Psychology, 76,* 35–45.

Triandis, H. C. (1989). Cross-cultural studies of individualism and collectivism. *Nebraska Symposium of Motivation, 37,* 41–133.

Watson, D., Clark, L. A. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 53,* 1063–1070.